THE FUTURE OF EMPLOYEES' LEARNING: UNDERSTANDING GENERATION Z ATTIITUDES TOWARDS ARTIFICIAL INTELLIGENCE

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Generation Z's attitude towards ever-developing technology and related AI reflects the interweavement of curiosity, fear, and cautious optimism. Since AI is constantly developing, it certainly changes the labour market, organisation processes, different human resource processes, as well as the training and development of employees. The main purpose of the research reported in this paper is to examine the attitudes of Generation Z regarding the use of artificial intelligence in the context of employee training and development. Empirical research was conducted on a sample of 129 respondents from Slovenia, and hypotheses were tested by descriptive statistics and T-test. The research results confirm the positive attitudes of Generation Z members towards contemporary training models, regardless of their sociodemographic characteristics. This aligns with the finding that Generation Z shows a strong interest in AI, with many actively seeking out information on the topic and learning about it, either formally or informally. This paper contributes to the human resource management literature because it brings new insights into Generation Z, whose participation in the active workforce will significantly increase in the coming years.

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1 Introduction

Generations can be defined as groups of individuals born within the same years, facing similar socio-cultural circumstances and comparable challenges and tasks. Due to similar circumstances in which they grew up, individuals from the same generation share common values, beliefs, expectations, and behaviours (Taş et al., 2017). Throughout recent history there have been several workforce generations, such as Silent Generation, Baby Boom, Generation X, Generation Y, Generation Z, and lastly Generation Alpha (Serinikli, 2019). Generation Z, which is the subject of research reported in this paper, is not still fully integrated into the labour market and it is considered as the upcoming generation of the workforce.

Along with the changed characteristics of the workforce, there are also changes in work and management processes, caused by the rapid development of technology. This particularly applies to artificial intelligence (AI). AI is a comprehensive concept incorporating many technologies and strategies that aim to empower robots to carry out jobs and activities that often need human intelligence (Russell & Norvig, 2016). AI mainly aims to replace monotonous and repetitive tasks traditionally performed by humans. Replacing people with automation enhances the quality and tempo of work while reducing costs (Muro et al., 2019). Kaplan and Haenlein (2019) propose a tripartite classification of AI systems, namely analytical, human-inspired, and humanized artificial systems. Analytical AI possesses only those qualities that align with those of cognitive intelligence.

It's clear that AI has potential to transform all aspects of business, including human resources management. For example, integrating AI-based systems in business organizations will profoundly impact workforce demographics, job characteristics, employer-employee relationships, human-technology interactions, customer experience, and competitive advantage in a rapidly changing market environment (Connely et al., 2021). The connection between technological development and employee training and development is particularly interesting. It could be characterized as a two-way relationship. On the one hand, the development of technology affects the obsolescence of the employees' knowledge and skills and imposes continuous learning as a necessity. Continuous training and general encouragement of the learning culture become the only way to ensure organisational flexibility and success. On the other hand, technological development affects the

way how organisations conduct training and development programs. Generally speaking, AI contributes to the efficiency, personalization, and adaptability of training programs (Guan, 2021; Maity, 2019). However, modern technologies may not be equally accepted by all generations of the workforce.

While a lot of research explores how AI is transforming various HRM functions, there is still a limited understanding of specific generational preferences for AI-powered training methods and how each generation responds to them. Therefore, by focusing on Generation Z, the upcoming workforce generation, and their attitudes as well as potential concerns towards AI, our paper contributes to the expansion of the literature on the role of AI in the future of employee training and development. This fills a gap in the existing literature.

2 Methodology

Through this research, we aimed to assess the attitudes of members of Generation Z regarding the application of AI in the process of training and development of employees. In other words, through this research, we observed members of Generation Z as the upcoming workforce. A questionnaire consisting of a combination of closed questions and five-level scales for expressing the attitudes of respondents was created. Data collection was carried out in January 2024. Total of 129 respondents from Slovenia participated in the research. These are students, i.e. young individuals who, by their age, belong to Generation Z. Although a segment of the respondents has some work experience, it is expected that this category will fully integrate into the labour market in a few years.

The main purpose of this research is to examine the attitudes of Generation Z regarding the use of AI in the context of employee training and development. The aim of the conducted empirical research is to provide an answer to the question of whether members of the upcoming workforce have positive attitudes towards contemporary training models, regardless of their sociodemographic characteristics. Based on previous knowledge about Generation Z, two hypotheses were formulated. Both of them assume positive attitudes of young people regarding the significant and use of AI in the context of employee training and development. The defined hypotheses were tested using the appropriate statistical analysis according to the presented methodology.

Regarding sociodemographic structure, there is a significantly higher participation of women in the sample. Women comprise two-thirds of the sample or 63.57%. Also, respondents who study social sciences (79.85%) are significantly more represented in the sample than respondents who study in the field of natural and engineering sciences (20.15%). In terms of employment, students with permanent, temporary or occasional employment participated in the sample with 54.26%.

3 Literature background

Generation Z was the first generation to be born into globally connected world, where ICT technologies were prevalent, and therefore characterised them. Most of their communications and friendships are established via social media (Nagy & Kölcsey, 2017). Members of Generation Z are open to new ideas and can swiftly apply any useful innovation to their daily lives. These innovations include mobile communication, social media, wearable technology, and AI. Therefore, Generation Z individuals are also called digital natives (Kayıkç & Bozkurt, 2018).

Some research shows that the majority of Generation Z believes that the development of AI has and will positively influence society (Dióssy, 2021). Generally, they are optimistic about future changes that AI may bring (Jyothychandra & Sulaimann, 2022).

The research was based on the assumption that a certain number of respondents are not familiar with the possibilities of applying AI in the process of training and development of employees, and the collected data confirmed this. Namely, only 41.08% of respondents stated that they are familiar with the possibilities of applying AI in the employee learning process. For this reason, a set of nine statements was created that describe various possibilities of improving training and development activities with the help of AI. With the help of a five-point scale, ranging from "not important at all" to "extremely important", the respondents expressed their attitudes regarding the importance of each of the nine formulated statements. Taking into account the previous knowledge about the attitudes of members of Generation Z, the following research hypothesis was formulated:

H1: Members of Generation Z consider AI as a significant tool for employee training and development, regardless of the observed sociodemographic characteristics.

The respondents' general attitudes regarding the use of AI in employee training and development were examined with the help of a set of ten statements. Some of them are positive, and others are negative. Respondents expressed their attitudes using a five-point scale, ranging from "strongly disagree" to "strongly agree." To avoid biased attitudes, the order of questions was randomized. Also, during statistical data processing, positive and negative statements were reconciled. In this phase of the research, the following hypothesis was formulated:

H2: Members of Generation Z have positive attitudes regarding the use of AI in employee training and development, regardless of observed sociodemographic characteristics.

To test the hypotheses, descriptive statistics (mean and standard deviation) and T-test were applied. The data were processed using the statistical software SPSS.

3 Results

Research results indicate that respondents understand AI quite well. The level of understanding is estimated by a five-point item, and the average value is 3.21 (the value of neutral midpoint is 2.5). This result is not surprising because 51.94% of the respondents have had the opportunity to learn about AI through formal and informal training methods. The high level of interest of Generation Z in the concept of AI is confirmed by the fact that 93.80% of respondents stated that they search for information and learn about AI independently, of their own volition. Also, 95.35% of the respondents believe that every student, regardless of their field of study, should learn about AI.

As explained in the methodology section, respondents' attitudes regarding the application of AI in employee learning processes were examined using two five-point scales. The first of them contains nine items about possible ways of applying AI in employee training and development programs. For example, "AI tools can recommend customized learning paths, including workshops, courses and

developing opportunities, based on performance metrics and identified employee skill gaps". The other statements within this scale are also positive, indicating positive aspects of the application of artificial intelligence in employee training and development programs. The Table 1 shows the average-rated level of estimated significance for each of nine items.

Table 1: Descriptive statistic regarding the significance of AI tools for improvement of employees learning process

	N	Mean	Std. Deviation
AI_ Possibil_Using_in_Training_1	129	3.75	.848
AI_ Possibil_Using_in_Training_2	129	4.05	.860
AI_ Possibil_Using_in_Training_3	129	4.17	.911
AI_ Possibil_Using_in_Training_4	129	4.14	.882
AI_ Possibil_Using_in_Training_5	129	3.50	1.039
AI_ Possibil_Using_in_Training_6	129	3.63	.893
AI_ Possibil_Using_in_Training_7	129	3.81	.893
AI_ Possibil_Using_in_Training_8	129	3.88	.857
AI_ Possibil_Using_in_Training_9	129	3.87	.922
Valid N (listwise)	129		

Source: Authors

It can be observed that respondents, on average, consider all nine items as significant, because in each case mean values are above the neutral midpoint. The reliability of this scale has been assessed using Cronbach's alpha coefficient, which is 0.831. Such a coefficient value indicates high internal consistency of the scale, reflecting a high level of stability and reliability in measurement.

When considering the average-rated significance of all nine items, T-test has shown that there is no statistically significant difference among respondents of different gender ($p = 0.078$, $p > 0.01$), study field ($p = 0.365$, $p > 0.01$), or employment status ($p = 0.015$, $p > 0.01$). Also, there is no statistically significant difference in the attitudes of respondents who are familiar with the possibility of applying AI in the process of training and development of employees, compared to respondents who are not familiar with such possibilities of AI ($p = 0.980$, $p > 0.01$). The presented results confirm the first hypothesis (H1).

Table 2: Significance of AI tools for improvement of employees' learning process – differences between respondent groups

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
AIApplicat_Av_ GENDER	Equal variances assumed	3.161	.078	1.844	127
	Equal variances not assumed			1.780	88.296
AIApplicat_Av_ STUDY_FIELD	Equal variances assumed	.827	.365	-.771	127
	Equal variances not assumed			-.829	42.623
AIApplicat_Av_ EMPL_STATUS	Equal variances assumed	6.109	.015	.443	127
	Equal variances not assumed			.456	123.574

Source: Authors

The second scale used in the research aimed to assess respondents' general attitudes regarding the application of AI in employee training and development. In this scale, we used seven positive statements (for example "AI improves employee experience during the learning and development process") and three negative statements (for example "AI dehumanizes the learning and developing process"). As explained in the methodology section, the order of the questions was randomized to avoid biased attitudes. Also, negative statements were reconciled with the positive statements. Table 3 contains the results of the descriptive analysis.

Table 3: Descriptive statistic regarding the use of AI in the employees learning process

	N	Mean	Std. Deviation
AI_in_training_General_Attitudes_1	129	3.80	.823
AI_in_training_General_Attitudes_2	129	3.71	.831
AI_in_training_General_Attitudes_3	129	3.73	.855
AI_in_training_General_Attitudes_4	129	3.90	.975
AI_in_training_General_Attitudes_5	129	3.22	1.023
AI_in_training_General_Attitudes_6	129	3.49	.858
AI_in_training_General_Attitudes_7	129	2.53	.985
AI_in_training_General_Attitudes_8	129	3.74	1.057
AI_in_training_General_Attitudes_9	129	2.66	1.320
AI_in_training_General_Attitudes_10	129	3.22	1.294
Valid N (listwise)	129		

Source: Authors

On average, level of agreement of respondents with the statements has a higher value than the neutral mean. As the negative statements were previously reconciled with the positive statements, these results indicate a positive attitude of the respondents regarding the application of AI in the employees learning process. Regardless of the above, the combination of positive and negative statements within this scale resulted in a slightly lower Cronbach's alpha coefficient value of 0.524. This coefficient value indicates moderate internal consistency of the scale.

Table 4: Application of AI tools in employees' learning process – differences between respondent groups

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
AIUse_Av_ GENDER	Equal variances assumed	3.544	.062	1.379	127
	Equal variances not assumed			1.330	88.088
AIUse_Av_ STUDY_FIELD	Equal variances assumed	2.576	.111	-1.203	127
	Equal variances not assumed			-1.334	44.641
AIUse_Av_ EMPL_STATUS	Equal variances assumed	2.331	.129	.377	127
	Equal variances not assumed			.381	126.842

Source: Authors

Regarding the average-rated level agreement of respondents with these statements, T-test has shown that there is no statistically significant difference among respondents of different genders ($p = 0.062$, $p > 0.01$), study field ($p = 0.111$, $p > 0.01$), or employment status ($p = 0.129$, $p > 0.01$). Also, there is no statistically significant difference in the attitudes of respondents who are familiar with the possibility of applying AI in the process of training and development of employees, compared to respondents who are not familiar with such possibilities of AI ($p=0.944$, $p > 0.01$). The presented results confirm the second hypothesis (H2).

4 Discussion and conclusion

The rapid development of modern technology, especially in AI, is revolutionizing our world. Generation Z, commonly known as digital natives, was born and raised in an era of widespread access to the internet and other technologies. Consequently,

Generation Z individuals are defined by their strong dependence on and use of technology in every aspect of their daily lives. Additionally, findings suggest that while the majority of Generation Z members see great potential in AI and believe it will positively influence society, there are also some concerns, mainly regarding its potential to eliminate some jobs and reduce opportunities for interpersonal interactions. Also, ethical considerations of AI are raised (Jyothychandra & Sulaimann, 2022).

Regarding the application of AI in learning processes, the majority of research focuses on formal learning processes of young individuals, such as those in higher education. Such research indicates that members of Generation Z are "generally optimistic about the potential benefits of AI, including enhanced productivity, efficiency, and personalized learning, and expressed intentions to use AI for various educational purposes" (Chan & Lee, 2023). However, there is not much research that considers members of Generation Z as the upcoming workforce and thus examines their attitudes through the prism of future employment. In terms of employee training and development programs, it is quite certain that there will be integration between traditional learning approaches and new approaches based on AI in the future, which may not be equally acceptable for all generations of employees. The results of this research showed that the upcoming generation of the workforce considers AI as a significant factor for the improvement of employees' learning process. Generally, they have positive attitudes regarding the use of AI in the employee training and development process, regardless of their sociodemographic characteristics such as gender, study field or employment status. Interestingly, all respondents have positive attitudes towards AI, although some of them were not familiar with the possibility of applying AI in the process of training and development of employees. As expected, both tested hypotheses were confirmed, and the results of this research are aligned with the results of similar research (Andrschchuk et al., 2022; Hernández-de-Menéndez et al., 2020; Persada et al., 2019), and previous knowledge about Generation Z.

Despite the small research sample, which is the major limitation of this study, research that considers Generation Z as the upcoming workforce can have multiple benefits for employers. A better understanding of the young generation's perspective towards AI, helps organisations to design training and development programs that would align with Generation Z's needs. Also, organizations could use this knowledge

to attract and retain young professionals, which currently is one of the major problems in the human resources management practice. For future research, it would be useful to explore how attitudes toward AI differ across generations. It would be interesting to see how AI is received by younger generations who were born and raised with ICT compared to older generations who have had to learn how to use it.

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